

What is claimed is;

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1. A semiconductor laser comprising an active region which includes at least a quantum well layer and upper and lower optical waveguide layers and is of  $\text{In}_x\text{Ga}_{1-x}\text{As}_y\text{P}_{1-y}$  ( $0 \leq x \leq 1$ ,  $0 \leq y \leq 1$ ) and upper and lower cladding layers formed of AlGaAs, wherein the improvement comprises that

at least one of the optical waveguide layers is not smaller than  $0.25\mu\text{m}$  in thickness, and

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a part of the upper cladding layer on the upper optical waveguide layer is selectively removed up to the interface of the upper cladding layer and the upper optical waveguide layer.

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2. A semiconductor laser as defined in Claim 1 in which the structure where a part of the upper cladding layer on the upper optical waveguide layer is selectively removed up to the interface of the upper cladding layer and the upper optical waveguide layer forms a ridge structure.

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3. A method of manufacturing a semiconductor laser defined in Claim 1 comprising the steps of

forming at least one of the optical waveguide layers in thickness not smaller than  $0.25\mu\text{m}$ ,

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forming the upper cladding layer of AlGaAs on the upper optical waveguide layer and

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selectively removing by etching a part of the upper cladding layer on the upper optical waveguide layer up to

*(The following information was obtained from the records of the Department of Social Services, New York City, dated July 1968.)*

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